



" clyzo " - Monograph Comparison



AS PER CURRENT USP 2022/EP11/JP18

Product Name	2-Propanol (USP, BP, Ph. Eur.) pure, pharma grade		Issue Date	March-23
Product Code	141090		Prepared by	Sr. Tech Lead
CAS NO.	67-63-0		Reviewed by	Manager Technical
Manufacturer Name	PanReac AppliChem		Version no.	CLYZO/PAN/141090/01

Sr. No.	Test	Pharmacopeial Specifications			
		Manufacturer COA <i>Complies USP, BP, Ph. Eur</i>	USP 2022	EP Version 11.0	JP 18
1	Description	Clear, colorless liquid, hygroscopic. Density at 20°C is about 0.785	Transparent, colorless, mobile, volatile liquid, having a characteristic odor and a slightly bitter taste. Is flammable.	Clear, colourless liquid.	Clear, colorless liquid. It has a characteristic odor. It is flammable and volatile.
2	Solubility	Miscible with water, alcohol, ether and trichloromethane	Miscible with water, with alcohol, with ether, and with chloroform	Miscible with water and with ethanol (96 per cent).	It is miscible with water, with methanol, with ethanol (95), and with diethyl ether
3	Identification 1	Passes The Test	In the test of assay, the retention time of the major peak of the Sample solution corresponds to the 2-propanol peak of the System suitability solution,	Relative density should be between 0.785 and 0.789	Should comply by yellow precipitate formation
4	Identification 2	Passes The Test	Should comply by methanol test	Refractive index should be between 1.376 and 1.379.	Should comply by producing a gas which has odor of acetone, and the gas turns the filter paper to redbrown.
5	Identification 3	Passes The Test	The infrared absorption spectrum obtained with sample should be concordant with the spectrum obtained with Isopropyl alcohol reference/working standard	The infrared absorption spectrum obtained with sample should be concordant with the spectrum obtained with Isopropyl alcohol reference/working standard	Not mentioned
6	Identification 4	Passes The Test	Not mentioned	Should comply by the entire sulfuric acid layer turning violet.	Not mentioned
7	Clarity of solution/Appearance of solution	Passes The Test	Not mentioned	Sample solution should be clear and colourless	Sample solution should be clear
8	Acidity or alkalinity	Passes The Test	NMT 0.70 mL of 0.020 N NaOH is required for neutralization.	NMT 0.6 ml of 0.01 M NaOH is required to change the colour of the indicator to pale pink.	After addition of 0.40 ml of 0.01 M NaOH a red color should be developed
9	Specific Gravity	Between 0.783 and 0.787 (at 25°C) Between 0.785 and 0.789 (at 20°C)	Between 0.783 and 0.787	Not mentioned	Between 0.785 and 0.788
10	Refractive index	Between 1.376 and 1.378	Between 1.376 and 1.378	Not mentioned	Not mentioned
11	Non Volatile Residue	NMT 0.002%	NMT 0.005%	NMT 20 ppm	NMT 0.005%
12	Distilling Range	Not mentioned	Not mentioned	Not mentioned	NLT 94% should distill between 81°C and 83°C
13	Absorbance	NMT 0.30 at 230 nm, 0.10 at 250 nm, 0.03 at 270 nm, 0.02 at 290 nm and 0.01 at 310 nm.	Not mentioned	NMT 0.30 at 230 nm, 0.10 at 250 nm, 0.03 at 270 nm, 0.02 at 290 nm and 0.01 at 310 nm.	Not mentioned
14	Peroxidex	Passes The Test	Not mentioned	No colour should develop	Not mentioned
15	Benzene and related substances/Volatile impurities	Benzene: NMT 2 ppm Ethanol: NMT 0.05% Total impurities: NMT 0.3%	Methanol : NMT 0.02% Individual known impurity: NMT 0.1% Maximum unknown impurity: NMT 0.1% Total impurities: NMT 1.0%	Benzene: NMT 2 ppm Total of impurities apart from 2-butanol : NMT 0.3%	Not mentioned

16	Related Substances	Methanol : NMT 0.02% Diethyl Ether : NMT 0.1% Acetone: NMT 0.1% Di-isopropyl Ether: NMT 0.1% 1-propanol: NMT 0.1% 2-Butanol: NMT 0.1% Individual known impurity: NMT 0.1% Total impurities: NMT 1.0%	Not mentioned	Not mentioned	Not mentioned
17	Water	NMT 0.5%	NMT 0.5%	NMT 0.5%	NMT 0.75%
18	Assay (C3H8O)	NLT 99.5%	NLT 99.0%	Not mentioned	Not mentioned
19	Elemental Impurities		Not mentioned	Not mentioned	Not mentioned
	Cd	NMT 0.5 ppm			
	Pb	NMT 0.5 ppm			
	As	NMT 1.5 ppm			
	Hg	NMT 1.5 ppm			
	CO	NMT 5 ppm			
	V	NMT 10 ppm			
	Ni	NMT 20 ppm			
	Tl	NMT 0.8 ppm			
	Au	NMT 10 ppm			
	Pd	NMT 10 ppm			
	Ir	NMT 10 ppm			
	Os	NMT 10 ppm			
	Rh	NMT 10 ppm			
	Ru	NMT 10 ppm			
	Se	NMT 15 ppm			
	Ag	NMT 15 ppm			
	Pt	NMT 10 ppm			
Li	NMT 55 ppm				
Sb	NMT 120 ppm				
Ba	NMT 140 ppm				
Mo	NMT 25 ppm				
Cu	NMT 250 ppm				
Sn	NMT 600 ppm				
Cr	NMT 25 ppm				
20	Residual solvents	Passes The Test	Not mentioned	Not mentioned	Not mentioned
	Storage	Storage below 25°C. Storage away from direct light.	Preserve in tight containers, and prevent exposure to excessive heat. Protect from light.	Protected from light.	Tight containers away from fire

Note - If you need any additional testing, you may use our Additional Testing Feature on the product page or contact your Clyzo representative.

Disclaimer - The information above is solely for your consideration. We do not recommend or affirm the suitability for any specific end use. We suggest the users should research & verify the specifications in accordance with their intended usage.